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REMARKS/ARGUMENTS

APR 12 2007

1. In the above referenced Office Action, the Examiner rejected claims 1, 6, 16, and 21 under 35 USC § 103 (a) as being unpatentable over Macnally (U.S. Patent No. 7,065,327) in view of Sabouri (U.S. Patent No. 6,999,743). In addition, the Examiner rejected claims 1, 2, 6, 16, 17, and 21 under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The Examiner has objected to claims 2 and 17 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The rejections and objections have been traversed and, as such, the applicant respectfully requests reconsideration of the allowability of claims 1, 2, 6, 16, 17, and 21.
2. Claims 1, 2, 6, 16, 17, and 21 have been rejected under 35 USC § 112, second paragraph. In particular, the Examiner cited "impedance at the first winding is substantially similar in the transmit mode and in the receive mode" and then commented does the applicant refer to similar impedance value, impedance type, or what? The applicant respectfully disagrees with this rejection and the reasoning thereof.

Impedance is term well known in the art to mean a measure of the response of an electric circuit to an alternating current, which is measured in ohms. The current is opposed by the capacitance and inductance of the circuit in addition to the resistance. The total opposition to the current flow is the impedance, which is given by a ratio of the voltage to the current in the circuit. [The New Penguin Dictionary of Electronics, Penguin Books, 1982, pp 231]

As such, the cited phrase by the Examiner with respect to the impedance is well understood in the art and this rejection should be withdrawn.

3. Claims 1, 6, 16, and 21 have been rejected under 35 USC § 103 (a) as being unpatentable over Macnally (U.S. Patent No. 7,065,327) in view of Sabouri (U.S. Patent

No. 6,999,743). The applicant respectfully disagrees with this rejection and the reasoning thereof.

Macnally teaches an integrated transceiver that is coupled to off chip components that includes an ISM band filter 112, a balun 114, an RF matching network 116 ... (Column 5, lines 8-13) Macnally further teaches that the PA and LNA each have their own associated network. The LNA has an impedance transformation network associated with it and the PA has a singly matched network associated with it. (Column 6, lines 51-54 and claim 1) Macnally further teaches that time division duplex (TDD) ensures isolation between the transmitter 124 and the receiver 126. (column 5, lines 26-27)

Sabouri teaches a line interface that includes a transmit path and a receive path. The transmit path includes a line driver and a two-matching impedance network. (column 1, lines 52-54) The receive path includes a hybrid network and a difference amplifier. The hybrid network acts as a selective filter and prevents the transmit signal from leaking into the receive path. (column 1, line 66, - column 2, line 2) As shown in Figure 1, the transmission path includes ... a transmit amplifier 16. ... The output of the amplifier 16 is serially passed through a pair of matching impedances 20 (each $Z_M/2$) ... (column 2, lines 18-27) The receive path includes ... a second filter 30 that is connected across the matching impedances 20. (column 2, lines 32-35)

As such, Macnally teaches an RF transceiver that includes an impedance transformation network for the LNA and a singly matched network for the PA to transceiver RF signals in a TDD manner (i.e., either transmitting or receiving). Sabouri teaches a line interface that includes a line driver and two equal matching impedances in the transmit path and a difference amplifier and filters in the receive path, where the line interface transmits and receives signals concurrently. Macnally and Sabouri are silent as to adjusting the impedances of their respect impedance networks.

The impedance transformation network for the LNA and a singly matched network for the PA of Macnally combined with the two equally matching impedances 20

of Sabouri does not render claim 1 obvious since this combined teaching does not teach or suggest "an adjustable load operably coupled to the second winding, wherein the adjustable load provides a first impedance based on a first impedance selection signal when the radio front end is in a transmit mode and provides a second impedance based on a second impedance selection signal when the radio front end is in a receive mode such that impedance at the first winding is substantially similar in the transmit mode and in the receive mode." Accordingly, the applicant believes that claim 1 overcomes the present rejection.

Claims 2 and 6 are dependent upon claim 1 and introduce additional patentable subject matter. The applicant believes that the reasons that distinguish claim 1 over the present rejection are applicable in distinguishing claims 2 and 6 over the same rejection.

The applicant believes that the reasons that distinguish claim 1 over the present rejection are applicable in distinguishing claim 16 over the same rejection.

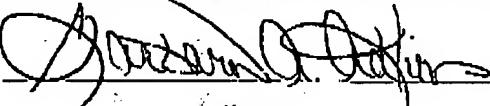
Claims 17 and 21 are dependent upon claim 16 and introduce additional patentable subject matter. The applicant believes that the reasons that distinguish claim 16 over the present rejection are applicable in distinguishing claims 17 and 21 over the same rejection.

For the foregoing reasons, the applicant believes that claims 1, 2, 6, 16, 17, and 21 are in condition for allowance and respectfully request that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present invention.

RESPECTFULLY SUBMITTED,

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